

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/890,836

DATE: 10/29/2001

TIME: 14:15:10

Input Set : A:\20377YP SEQ LIST.TXT

Output Set: N:\CRF3\10292001\I890836.raw

ENTERED

4 <110> APPLICANT: Andrew Bett
5 Volker Sandig
6 Rima Youil
8 <120> TITLE OF INVENTION: IMPROVED HELPER DEPENDENT VECTOR SYSTEM
9 FOR GENE THERAPY
11 <130> FILE REFERENCE: 20377YP
13 <140> CURRENT APPLICATION NUMBER: 09/890,836
C--> 14 <141> CURRENT FILING DATE: 2001-09-28
16 <150> PRIOR APPLICATION NUMBER: PCT/US00/02405
17 <151> PRIOR FILING DATE: 2000-01-31
19 <150> PRIOR APPLICATION NUMBER: 60/138,134
20 <151> PRIOR FILING DATE: 1999-06-08
22 <150> PRIOR APPLICATION NUMBER: 60/118,601
23 <151> PRIOR FILING DATE: 1999-02-04
25 <160> NUMBER OF SEQ ID NOS: 17
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31 <212> TYPE: DNA
32 <213> ORGANISM: Artificial Sequence
34 <220> FEATURE:
35 <223> OTHER INFORMATION: Consensus sequence
37 <221> NAME/KEY: misc_feature
38 <222> LOCATION: (1)...(15)
39 <223> OTHER INFORMATION: n = A,T,C or G
41 <400> SEQUENCE: 1
W-42 atttgnnnnn nnngc 15
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47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Adenovirus 5
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53 attttgtgtt 10
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57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial Sequence
60 <220> FEATURE:
61 <223> OTHER INFORMATION: Consensus sequence
63 <400> SEQUENCE: 3
64 attttgttgt 10
66 <210> SEQ ID NO: 4
67 <211> LENGTH: 158
68 <212> TYPE: DNA
69 <213> ORGANISM: Artificial Sequence

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71 <220> FEATURE:
72 <223> OTHER INFORMATION: Synthetic packaging signal
74 <400> SEQUENCE: 4
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76 gggccgagta agatttgacc gtttacgcgg ggactttgaa taagagcgag tgaaatctga      120
77 ataattttgt tgtactcata gcgcgtaatc tctagacg      158
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 158
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Adenovirus 5
87 <400> SEQUENCE: 5
88 gtacacagga agtgacaatt ttcgcgcggt tttaggcgga tgtttagta aatttgggcg      60
89 taaccgagta agatttggcc attttcgcgg gaaaactgaa taagaggaag tgaaatctga      120
90 ataattttgt gttactcata gcgcgtaatc tctagacg      158
92 <210> SEQ ID NO: 6
93 <211> LENGTH: 65
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Linker
100 <400> SEQUENCE: 6
101 agctcggccg attattggcg cgccagatct gcggccgctt ctagaaacgc gtgaattcgg      60
102 cgcca      65
104 <210> SEQ ID NO: 7
105 <211> LENGTH: 65
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Linker
112 <400> SEQUENCE: 7
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114 ggccg      65
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117 <211> LENGTH: 40
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: PCR Primer
124 <400> SEQUENCE: 8
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127 <210> SEQ ID NO: 9
128 <211> LENGTH: 41
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: PCR Primer
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143 <220> FEATURE:
144 <223> OTHER INFORMATION: PCR Primer
146 <400> SEQUENCE: 10
147 atcagtttagc ggccgcacaa gctaagatca caaagctgtt t 41
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 37
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: PCR Primer
157 <400> SEQUENCE: 11
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162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
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166 <223> OTHER INFORMATION: PCR Primer
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172 <211> LENGTH: 45
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: PCR Primer
179 <400> SEQUENCE: 13
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182 <210> SEQ ID NO: 14
183 <211> LENGTH: 41
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: PCR Primer
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194 <211> LENGTH: 46
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: PCR Primer
201 <400> SEQUENCE: 15
202 tcgacgcgta tttaaatgtg ctggagtgtt gagatactgt agtggt 46

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210 <223> OTHER INFORMATION: Modified adenovirus
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214 agttttgtgac gtggcgcggg gcgtgggaac ggggcgggtg acgtagtagt gtggcggaag      120
215 tgtgatgttg caagtgtggc ggaacacatg taagcgacgg atgtggcaaa agtgacgttt      180
216 ttggtgtgcy ccggtgtaca caggaagtga caattttcgc gcggttttag gcggtgttg      240
217 tagtaaaattt gggcgtaacc gagtaagatt tggccatttt cgcgggaaaa ctgaataaga      300
218 ggaagtgaaa tctgaataat tttgtgttac tcatagcgcg taatatttgt ctagggccgc      360
219 ggggactttg accgttttac tggagactcg cccaggtgtt tttctcaggt gttttccgcg      420
220 ttccgggtca aagttggcgt tttgattcgg ccgcttgggt catagacttc tttgagaacc      480
221 agttataaagc tatggtttct ctccacagaa aaagcactta tgggtgtctcc ccctttccag      540
222 cccaccaaca ttttacatct aatttggggg ggttttcttg accacttaat acccatccat      600
223 ggatctcatg tgaagactcc cctggcttga gaaatcactg tcttgttgaa aatgggaaca      660
224 aagctaagtc agatagctgg ttcacagca atgactttga ccaagcctga tcccacccta      720
225 cccaccccca cccagtgac cccccccac aatggagcac acaactctaa actggtttgt      780
226 aggtatgtgt gtgtgaacac gctgaggaat ctgcaaaacc aaatggtgag tgcaaaacca      840
227 aacagtcacg agtaaatctc acaacaacca cgtcctgagc tgcagccctt gttgaactat      900
228 accccactag ggccccaaga ttttaggact tgtgtgtggg tgggacctcc ctttctatc      960
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236 tctttgcaat ggataatagt tcagtagata ttttgatgta atatttgaaa taacaataaa     1440
237 aattgccacc actgaattta ttgagcattt gctgtgcttt aggcactaac ccaggttctt     1500
238 taaatatttg gtcttattcg atctgtataa atagccatct atgagaaaagg gactattatt     1560
239 gcccttattt tacaaatgag gccaatgagg cccagagagg ttaactaagt tgcccaaaat     1620
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244 aaatgggaat aagaagacaa cctaactacc tgaacagttt tagagatgac tcatgcccac     1920
245 cctctaaaaa ccaaacaaaa acaacaaagt caagaaaacc catgaaatct tagcaagcga     1980
246 tttctatgta cttgtgaaaa ggatttcttt accattctaa tgggatttat gccaaccata     2040
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250 taactttaaa taccatttta tagccacact ggagttttga agacctcaat atgcaaatat     2280
251 tactcaggtt ctgataactt gtctgtccca tgataacaca ctctaaaagc aatgaatggg     2340
252 gcttatttgt agagaactga agcattttta gcttttgctc aggaatccct ggtagcttcc     2400
253 tgtgacttgc aagatattag tgatgggtca agaaacagga ccccccata gcataacata     2460
254 cgcagtgcct cagtagtcca tcaggcagaa aaaactgcag atggcacatg gaaatgacca     2520

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255	gcggcggaag	atacccccac	agtgtgggca	gttctatttc	agcagcaatc	aagagggggc	2580
256	ctggagccac	tcaatcaagt	ggagcaggat	gggagcaagc	actgtgcaga	ccaatgcaat	2640
257	ccccagttaa	cacaaaaaat	aaataaaaga	gatgagattc	agtctcttga	ctgtgactga	2700
258	ctgggagctt	tatagctgat	gcttgtgtct	tttctccatt	ttatttaatt	aggaaaagaa	2760
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260	tttcaacttc	tagaagtttc	taaacataag	gtaaatccat	ctttgtcctt	gggatcactg	2880
261	cacatctcag	aaaggcaaat	aaatcagtaa	ttggtgggca	taattactag	ctcatggact	2940
262	gacaaggctc	acactatttc	gaatctcaca	gaagtaagcc	atgggacaga	tagagtctga	3000
263	tagtggtgct	ccgtttcctg	gaggtcacac	ttactcatcc	ccctggacc	tgggcttctc	3060
264	atgattgtca	gagagtttgc	tggaaaccag	tcagcccagt	ttcccttccc	ctgaaaaatc	3120
265	ctccaatggc	tcgcaccaag	actagagatg	caagtgcag	cacatccacc	ctctcagcag	3180
266	ccaggttttg	cgttccataa	tgtcacgtac	ccccagtc	accaatctcc	ttggagctct	3240
267	ccagacaggc	tgccatgtgt	ggtcggccct	ctgtgcttgt	gctccttggt	ttgccaaagg	3300
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275	gagagtgatc	ataatcatat	ggtgaaaata	acatcagcta	acatatttac	tgaacatgct	3780
276	ttagtgtgct	gggcactgaa	ctctgtgcac	atgtgaattt	gagatagatt	gttcctagct	3840
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301	ggacagccta	ggccgtgtgg	ccttttataa	acaaagctat	gaaggggtcg	tcaaattttc	5340
302	tagggctgca	actgtggcac	tacgtcctgt	tgtgcccagt	gacactgaca	agcagcactg	5400
303	agttctatgc	aagcccagg	gtgcttctct	catggtgacc	cccagagaac	taaggcccag	5460

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Output Set: N:\CRF3\10292001\I890836.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1